

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-5 are pending in the application. Claim 1 is amended by the present amendment to correct cosmetic matters of form. No new matter is presented.

This amendment is submitted in accordance with 37 C.F.R. §1.116 which after final rejection permits entering of amendments canceling claims, complying with any requirement of form expressly set forth in a previous Office Action, or presenting rejected claims in better form for consideration on appeal. The present amendment changes the recitation of “the common channel line”, at line 14 of Claim 1, to “the common signal channel line” so that the terminology in the claims is consistent, thereby presenting the rejected claims in better form for consideration on appeal. No new matter has been added, and this amendment does not raise new issues requiring further consideration and/or search. It is therefore respectfully requested that the present amendment be entered under 37 C.F.R. §1.116.

The undersigned appreciatively acknowledges the courtesy extended by Examiner Wilson by holding a telephonic interview with the undersigned on January 4, 2006. The substance of the interview is reflected in the arguments presented below. No agreement was reached during the interview pending the submission of a formal response to the outstanding Official Action.

In the outstanding Official Action, Claims 1-5 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse this rejection.

Independent Claim 1 relates to a demand assignment multiple access (DAMA) system in which small amounts of data can be transmitted over a common signal channel (CSC) without requiring an earth station to demand an assigned communication line. The system

includes a specific earth station (e.g. hub) configured to perform line assignment control and a plurality of other stations (e.g., remote stations) configured to be connected to the hub station by a CSC line through a communication satellite. The earth stations communicate larger quantities of data by transmitting a request to the specific earth station for a communication line. However, when the quantity of data to be transmitted is below a predetermined threshold, as determined by the earth station, the earth station transmits data over the CSC line without requesting an assigned communication line.

Therefore, the claimed system improves system efficiency by transmitting small amounts of data over the CSC line, without demanding a dedicated communication line from the specific earth station. This prevents wasteful demand of assigned communication links when only a small amount of data is to be transmitted between earth stations.

Independent Claim 1 recites, *inter alia*, a satellite communications system, comprising:

... a plurality of other earth stations configured to be connected to said specific earth station by a common signal channel line through a communications satellite...

said plurality of other earth stations are configured to transmit data to said specific earth station over the common channel line without requesting a communication line when said plurality of other earth stations determine that a quantity of data to be transmitted is below a predetermined threshold.

In rejecting Claims 1-5 under 35 U.S.C. § 112, first paragraph, the Official Action states that:

The specification on pages 14-16 teaches that a hub station receives a request over a common signal channel and determines whether the request for usage of the common channel line is less than a specific quantity. The specification does not teach that the plurality of earth stations makes the decision. Where in the specification does it say that "said plurality of other earth stations determine that a quantity of data to be transmitted is below a predetermined threshold".

Applicants respectfully traverse these above-noted assertions.

As described in an exemplary, non-limiting embodiment at pp. 14-16 and Fig. 4 of the specification, the remote stations (2) includes a control section (21c) having a transmission band selection means (21e) and a time slot selection means (21f). The band selection means (21e) judges which of the forward CSC line or communication line is more suitable for transmission in view of the data quantity to be transmitted. The time slot selection means (21f) then selects the time slot(s) suitable for the data quantity, in the case that the forward CSC line is chosen to be used.

Further, as described at p. 14, line 24-p. 15, line 7, before the remote station (2a) transmits any data to the hub station (1), the control section (21c) in the IDU (21) of the remote station (2a) judges whether or not the data are within a quantity that can be transmitted through the forward CSC line. If the data quantity is judged transmittable, the most suitable forward CSC line is selected among the plurality of forward CSC lines, and the data is transmitted to the hub station (1) through the selected CSC line.

The outstanding Official Action asserts that Claim 1 is not enabled because “[t]he specification on pages 14-16 teaches that a hub station receives a request over a common signal channel and determines whether the request for usage of the common channel line is less than a specific quantity.” This is clearly not the case, in contrast, the specification clearly supports and enables the claimed feature that “said plurality of other earth stations determine that a quantity of data to be transmitted is below a predetermined threshold”. As discussed above, the plurality of other earth stations are capable of “judging which of the forward CSC line or communication line is more suitable transmission in view of the quantity of data to be transmitted”<sup>1</sup>, not the specific earth station (hub).

Thus, as recited in independent Claim 1, the plurality of other earth stations are configured to transmit data to said specific earth station over the common channel line

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<sup>1</sup> Specification, Fig. 4 and p. 14, lines 10-12.

without requesting a communication line when said plurality of other earth stations determine that a quantity of data to be transmitted is below a predetermined threshold. As discussed above, such a configuration is clearly described in the specification in such a way to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

In the “Response to Amendment” portion of the Official Action, states that p. 15, lines 1-7 “never states” that “an earth station makes the decision relative to a threshold”. However, as discussed above, Fig. 4 and p. 14, lines 10-17 of the specification describes that “the mentioned control section 21c [in the remote station] is provided with transmission band selection means 21e and time slot selection means 21f...performing a function of judging which of the forward CSC line or communication line is more suitable for transmission in view of the data quantity to be transmitted”, further, as described at p. 16, line 20-p. 17, line 4 of the specification, an advantage of the claimed system is that “the time before starting data transmission can be shortened on the condition that the data quantity is below a certain level”. Therefore, the amount of data to be transmitted is clearly judged by this certain level, which is analogous to a threshold.

Therefore, the originally filed specification clearly describes, enables and supports the claimed feature of “determine that a quantity of data to be transmitted is below a predetermined threshold”, as recited in independent Claim 1.

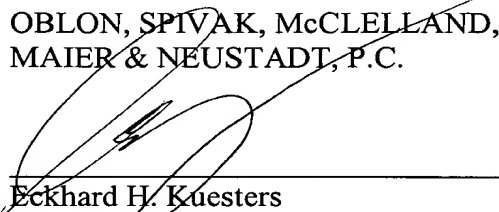
Accordingly, in light of the above discussion, the features recited in independent Claim 1 are clearly described in the specification in such a way to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Thus, Applicants respectfully requests that the rejection of Claims 1-5 under 35 U.S.C. § 112, first paragraph, be withdrawn.

Consequently, in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-5 is definite, enabled and patentably distinguishing over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



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Eckhard H. Kuesters  
Attorney of Record  
Registration No. 28,870

Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)

Andrew T. Harry  
Registration No. 56,959

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